

Atlantis approaches International Space Station

May 16 2010, by Jean-Louis Santini



In this image provided by NASA space shuttle Atlantis' cargo bay and its vertical stabilizer intersecting Earth's horizon was provided on Saturday May 15, 2010 by one of the six STS-132 crew members. A snagged cable forced Atlantis' astronauts to resort to a more inconvenient and less comprehensive method of inspecting their space shuttle Saturday. Docking with the International Space Station is scheduled for Sunday at 10:27 a.m. EDT. (AP Photo/NASA)

The US shuttle Atlantis neared the International Space Station Sunday as its crew prepared to deliver tons of crucial new equipment to the nearly-completed orbital laboratory.

The shuttle began its 12-day final trip Friday afternoon, when it blasted off from Cape Canaveral, Florida into a clear blue sky.

The 32nd and final scheduled voyage for Atlantis, first launched in

1985, will take the astronauts to the orbiting space research facility, delivering an integrated cargo carrier and a Russian-built mini research module.

NASA had warned in the hours after liftoff that the ISS might be forced into a "debris avoidance maneuver" to steer clear of a piece of orbiting space junk, just as Atlantis would be approaching.

But on Saturday the US space agency gave the all clear, and the shuttle remained on schedule for Sunday's 1427 GMT docking.

"Updated tracking information showed the object will remain a safe distance away and the maneuver is not necessary," NASA said on its website.

Just before liftoff, launch director Mike Leinbach wished the Atlantis crew "good luck and Godspeed," encouraging them to "have a little fun up there."

Based on current plans, the Atlantis launch is one of the last three missions of NASA's shuttle program, which is due to be mothballed at the end of the year.

After this mission, only two more shuttle launches remain, one in September for Discovery and the final blast off for Endeavour in November.

During a 12-day mission largely spent moored to the ISS, Atlantis and the crew will deliver over 12 tonnes of equipment, as astronauts seek to complete the 100-billion-dollar orbiting outpost.

"Twelve days, three (spacewalks), tons of robotics.... We're putting on spares that make us feel good about the long-term sustainability of the

ISS, replacing batteries that have been up there for a while, and docking a Russian-built ISS module," said space shuttle program manager John Shannon.

In a poignant moment for NASA as the US space agency counts down towards the end of an era in human spaceflight, Atlantis will be retired upon its safe return home after a quarter-century career.

But NASA officials did not rule out the possibility of Atlantis taking flight one more time.

"From a processing prospective we are going to process Atlantis like we always do, because it has to be ready for a rescue mission" in the event of an emergency during the final two shuttle flights, Leinbach said.

"If it happens to turn into a mission to the space station, we will do what is necessary."

NASA administrator Bill Gerstenmaier said that any decision to launch an extra mission beyond the final three scheduled this year would probably come from President Barack Obama himself, who would need a budget of between 600 million and one billion dollars for the flight.

"If we want to make it in a real mission, we will probably like to know in June to get things in place," and that the extra launch would not be possible before June 2011, Gerstenmaier said.

Should an extra flight be added, NASA envisions sending four astronauts to the ISS along with a multi-purpose logistics module.

"This will be the best way to leave the station in the best configuration we can," Gerstenmaier said.

At present, NASA and partners Russia, Europe and Japan have agreed to keep the orbiting station operational until at least 2020. Once the three remaining shuttles are retired, the United States will rely on Russian Soyuz spacecraft to take astronauts to the ISS until a new fleet of commercial space taxis is operational.

Obama effectively abandoned in February plans by his predecessor George W. Bush to send astronauts back to the moon by 2020 and perhaps on to Mars.

Constrained by soaring deficits, Obama submitted a budget to Congress that encouraged NASA to focus instead on developing commercial transport alternatives to ferry astronauts to the ISS after the shuttle program ends.

Nonetheless, Obama set a bold new course in April for the future of US space travel, laying out a vision to send American astronauts into Mars orbit by the mid-2030s.

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